

**To:**  
Jonathan Ikan  
Cultural Resources Manager  
NASA Ames Research Center  
Moffett Field, CA 94035-1000

**CC:**  
Fabian Bonaldi, AECOM

**Project name:**  
Building 19 Rehabilitation for NASA Exchange  
Lodge Project

**Project reference:**  
60586656

**From:**  
Trina Meiser, Senior Architectural Historian

**Date:**  
November 4, 2019

# Memo

**Subject:** Section 106 Consultation on Building 19 Rehabilitation for NASA Exchange Lodge Project, NASA Ames Research Center, Moffett Field, Santa Clara County, California

## 1. Introduction

The National Aeronautics and Space Administration (NASA) Ames Research Center (ARC) proposes the Building 19 Rehabilitation for NASA Exchange Lodge Project (project or undertaking) at ARC, Moffett Field, Santa Clara County, California. As the lead federal agency, NASA is responsible for compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (54 United States Code 300101 et seq.), which requires federal agencies to consider the effects of their activities and programs on historic properties, and its implementing regulations in 36 Code of Federal Regulations (CFR) Part 800. The purpose of this memorandum is to provide necessary information for compliance with Section 106, including a description of the undertaking and the Area of Potential Effects (APE), the methodology used to identify and evaluate historic properties within the APE, a description of the affected historic properties, and an assessment of potential effects resulting from the undertaking.

### 1.1 Project Location

Building 19 is on North Akron Road on Shenandoah Plaza within the NASA Ames Research Park at ARC, Moffett Field, Santa Clara County, California (see Attachment A; Map Figures 1 and 2). The NASA Ames Research Park is an area of ARC designated as a shared-use research and development and education campus for industry, academia, non-profits, and government. Several public and private entities lease offices and facilities in the research park. Building 19 is also within the U.S. Naval Air Station (NAS) Sunnyvale Historic District (known locally as the Shenandoah Plaza Historic District), which was listed in the National Register of Historic Places (NRHP) in 1994 (NRHP #94000045) (Attachment A; Map Figure 3). Built in 1933 as part of the original NAS Sunnyvale campus plan, it is listed in the NRHP as a contributor to the district.

### 1.2 Project Personnel

This study was conducted by cultural resources professionals who meet the Secretary of the Interior's Professional Qualifications Standards (48 Federal Register 44738). Trina Meiser, M.A., Senior Architectural Historian, served as the Principal Investigator; Lauren Downs, M.A., RPA, provided map figures; and Kirsten Johnson, M.A., served as the lead verifier of this document.

## 2. Description of the Undertaking

The project involves the rehabilitation of existing hotel rooms (Rooms 1140-1148 and 2240-2248), hallways, and two lobbies (L1001, L2001) in the north wing of the west addition of Building 19 for the NASA Exchange Hotel, which is considered an undertaking per 36 CFR § 800.3(a). The purpose of the undertaking is to upgrade hotel services at ARC. The need for the undertaking is to improve facilities to full operational capability.

This project would involve:

- Demolition of interior finishes, which would require:
  - abatement of all flooring, baseboards, lead paint, applicable walls, ceiling tiles, showers/tiles, bathroom fixtures, and other materials,
  - removal of existing ceiling tiles, carpet/baseboards/pads, curtains/curtain rods, air conditioning window units, shelving, and radiators and radiator lines, and
  - removal of sinks, faucets, mirrors, toilets, showers, shower walls, floor tiles in bathrooms.
- Renovation of the interior finishes, which would involve:
  - preparation of interior walls by correcting framing, installing new sheetrock/tape/texture, patching and painting walls and ceilings, caulking wall and ceiling penetrations, and applying fire blocking, as required,
  - installation of new ceiling tiles,
  - installation of new baseboards, carpet pads and carpet, or tile flooring,
  - installation of new fire-rated doors and hardware,
  - painting of window frames, doors, door registers, and vents,
  - redirection of plumbing for new shower configuration and replacement of fixtures and finishes in bathrooms, and
  - enclosure of eight window openings from the interior for privacy using sheetrock or shutters (exterior windows to remain intact).
- Installation of a New Variable Refrigerant Flow (VRF) heat recovery system, which would involve:
  - installation of a new 16-ton Mitsubishi condensing unit on roof of the north wing of Building 19 (adjacent to existing units); a new branch circuit controller, insulated refrigerant lines, controls, and line voltage interfaces in the basement and crawl spaces; piping to each room; and new floor-mounted fan coil units and appropriate condensate drain lines in each hotel room and
  - replacement of eight existing rooftop exhaust fans.
- Electrical circuit upgrades, which would involve:
  - replacement of existing light cans with new recessed ceiling mount light and wall light fixtures,
  - installation of new 120-volt outlets and conduits, as required by code, and
  - installation of new dimmer switches, USB connectors/chargers, light switches in all appropriate areas.
- Alarm system upgrades, which would involve:
  - installation of conduit; electrical junction boxes for device mounting and junction points; fire alarm cable as required; fire alarm hardware devices, smoke detectors with sounder bases, speakers, speaker/strobes; and new fire panel.

### 3. Area of Potential Effects

The APE is defined to address both direct and indirect impacts on historic properties. The APE encompasses areas that may be affected by both temporary and permanent construction activities. No ground disturbance is associated with this project. Interior alterations to Building 19 would have no indirect impacts on other historic properties. Exterior alterations to Building 19 would be relatively minor due to the scale and visibility of the changes and are unlikely to have indirect impacts that might change the physical character or setting of other historic properties; therefore, the APE is limited to the Building 19 footprint (see Attachment A; Map Figure 3).

### 4. Identification of Historic Properties

Historic properties are defined as any district, site, building, structure, or object that is included in or is eligible for listing in the NRHP. The following sections describe efforts to identify historic properties in the APE.

#### 4.1 Architectural Resources

##### 4.1.1 Previous Evaluation

The APE has been previously studied for cultural resources, and a comprehensive historic context for ARC, including NAS Sunnyvale/Moffett Field, has been developed (AECOM 2014; AECOM 2017). Building 19 is listed in the NRHP as a contributor to the NAS Sunnyvale Historic District.

The NAS Sunnyvale Historic District was listed in the NRHP on February 24, 1994 (see Attachment A). The district was listed under NRHP Criteria A and C in the areas of Military History, Architecture, and Engineering, uniquely representing the development of U.S. naval aviation prior to World War II as one of two stations built to port lighter-than-air dirigibles in the 1930s. The listed periods of significance were 1930-1935 and 1942-1946. Hangars One, Two, and Three particularly represent twentieth-century military planning, engineering, and construction as some of the last extant gigantic airship hangars in the United States. The core of the historic station is centered on Shenandoah Plaza and buildings that incorporate Spanish Colonial Revival design. The district included several contributing buildings and structures that generally date to the 1930s to 1940s NAS Sunnyvale/Moffett Field period and exhibit the Spanish Colonial Revival style (with some exceptions, including Hangars One, Two, and Three). The district nomination specifically stated that none of the interiors retained architectural integrity or historic significance because the buildings have been in continuous use since construction and altered to accommodate changes in uses and space requirements (NRHP 1994). No significant interior spaces were identified in the nomination.

In 2013, a historic property survey of Moffett Field was conducted to evaluate the significance of additional resources related to the airfield and concluded that the airfield and related resources are eligible for the NRHP under an expanded context for the NAS Sunnyvale Historic District (AECOM 2013). The State Historic Preservation Officer (SHPO) concurred on expanding the boundary of the district on June 6, 2013 (OHP reference: NASA\_2013\_0417\_001) with a revised period of significance of 1942 to 1961 for the airfield. It also revised the district's statement of significance to include World War II military missions. However, the 2013 study did not revisit the previously listed areas of the district or its contributing and noncontributing resources.

In 2017, NASA ARC consulted with the SHPO for a separate undertaking that involved partial rehabilitation of Building 19 for the U.S. Geographical Survey offices. Under that consultation, the interior was considered noncontributing to the significance of the building, and changes were determined to have no adverse effect on historic properties. The SHPO concurred with the Finding of No Adverse Effect in a letter dated June 5, 2017 (OHP Reference NASA\_2017\_0508\_001). The project area covered in that undertaking did not include the subject project area of the current undertaking.

#### 4.1.2 Survey

A survey of the APE was conducted on October 23, 2019. The APE is located in the NAS Sunnyvale Historic District. Building 19, the only historic property in the APE, was revisited to assess current conditions.

##### *Building 19 – Bachelor Enlisted Quarters*

Building 19 is a two-story building with a complex plan, frame construction, stucco siding, and a low-pitched Spanish tile gabled roof (Photograph 1). The original portion of the building was constructed in 1933 and had a U-shaped plan with a gabled roof covered in Spanish tile and Spanish Colonial Revival-style features, such as a prominent arcaded loggia in the first story of the façade and elaborate, molded ornaments at the main entrances. Substantial wings were added at the east and west ends of the building in 1952, more than doubling the building's footprint. The façade of the original building was extended with perpendicular wings on either side. The two-story wings have flat roofs with low parapet walls, stucco exterior walls, and symmetrical rows of fenestration containing metal double-hung sash windows in each story. The building is currently used for offices; the west wing operates as the NASA Exchange Lodge hotel. Located on the north side of Shenandoah Plaza, Building 19 is one of the major buildings on Shenandoah Plaza that distinguishes the core of the district.

The project area consists of the north wing of the west addition of Building 3 (Photographs 2-5). The wing contains Rooms 1140-1148 and 2240-2248, hallways, and lobbies L1001 and L2001. The interior finishes of the hotel spaces have been modified several times to maintain operations (Photographs 6-8). Typical windows are double-hung metal sash (Photograph 9).



**Photograph 1. Building 19, south elevation, view facing north**





**Photograph 2. Building 19, west addition, south wing at right, view facing northeast**



**Photograph 3. Building 19, west addition, north wing in background, view facing northeast**



**Photograph 4. Building 19, north wing, view facing southeast**



**Photograph 5. Building 19, north wing, view facing east**





**Photograph 6. NASA Exchange Lodge, typical hallway interior**



**Photograph 7. NASA Exchange Lodge, lobby**



**Photograph 8. NASA Exchange Lodge, typical guest room**





Photograph 9. Building 19, north wing, typical window exterior

#### 4.1.3 NRHP Status

Building 19 was built in 1933 in Spanish Colonial Revival-style as part of the original campus plan of the naval air station. It was listed in the NRHP in 1994 as a contributor to the NAS Sunnyvale Historic District, which is significant under NRHP Criteria A and C with periods of significance of 1930-1935 and 1942-1946 (NRHP 1994). On June 6, 2013, the SHPO concurred on expanding the district boundary to include the airfield with a revised period of significance of 1942 to 1961 for the airfield only (OHP reference: NASA\_2013\_0417\_001). In 2017, NASA ARC consulted with the SHPO for a separate undertaking that involved partial rehabilitation of Building 19 for the U.S. Geographical Survey offices. Under that consultation, the 1952 wings were considered contributing features, despite the listed periods of significance for Building 19. The SHPO concurred with the Finding of No Adverse Effect in a letter dated June 5, 2017 (OHP Reference NASA\_2017\_0508\_001).

## 5. Assessment of Effects

Per 36 CFR § 800.5(a)(1), an adverse effect results when an undertaking may alter, either directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the historic property's integrity.

As indicated in the NRHP district nomination, the interior spaces of the district's contributing buildings have been previously altered to accommodate changes in uses and space requirements and none of the interiors retain architectural integrity or historic significance (NRHP 1994). Therefore, proposed alterations to the interior finishes for the purposes of upgrading existing hotel rooms, hallways, and lobbies would not adversely affect any character-defining features of Building 19.

The proposed exterior changes of Building 19, consisting of lead paint abatement and repainting of the windows are unlikely to negatively impact Building 19 or any of the other district contributors in the vicinity of the building. Other improvements that may be partially visible from the exterior include the installation of the VRF condensing unit on the roof and the interior enclosure of eight window openings, although these changes will be screened by the parapet of the north wing's roof and the existing windows, respectively. Alterations to Building 19 will not compromise the integrity of Building 19 or any other contributing properties in the district or the district as a whole. Therefore, the undertaking will not result in any adverse effects on historic properties.

## 6. Summary of Findings

The APE contains Building 19, which is listed in the NRHP as a contributor to the NAS Sunnyvale Historic District. The proposed undertaking would not to alter, directly or indirectly, any of the characteristics of Building 19 or the NAS Sunnyvale Historic District that qualify it for inclusion in the NRHP. Therefore, the proposed undertaking would result in No Adverse Effect on historic properties per 36 CFR § 800.5(b).

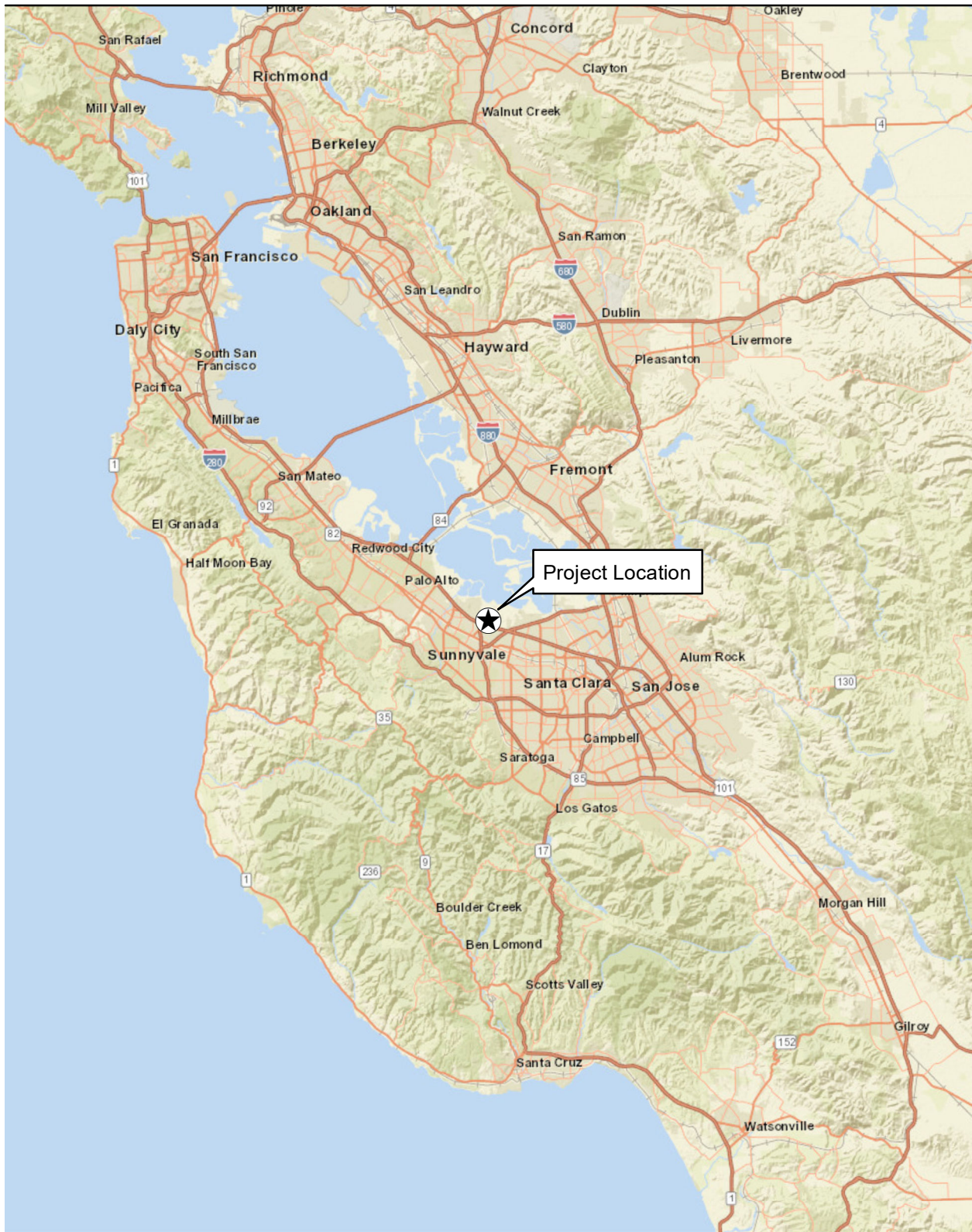
## 7. References

AECOM, 2013. *Historic Property Survey Report for the Airfield at NASA Ames Research Center, Moffett Field, California*. Accessible online at [https://historicproperties.arc.nasa.gov/downloads/hpsr\\_airfield.pdf](https://historicproperties.arc.nasa.gov/downloads/hpsr_airfield.pdf).

National Register of Historic Places (NRHP), 1994. U.S. Naval Air Station Sunnyvale, California, Moffett Field, Santa Clara County, California, NRHP # 94000045.

## Attachments

Attachment A: Map Figures 1-3 (Project Location, Project Vicinity, APE)



Source: ESRI, AECOM, NASA



0 5 10 20 Miles



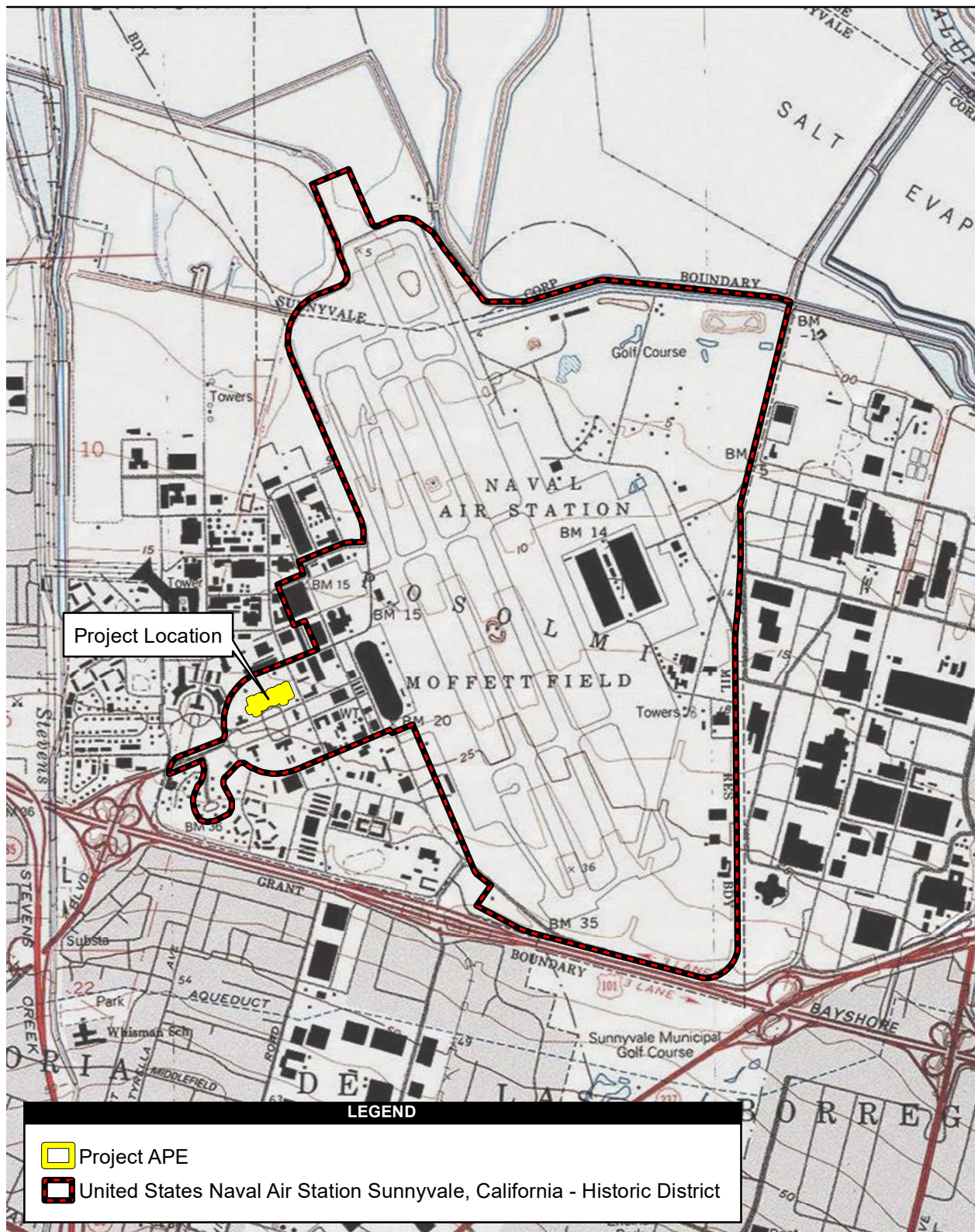
Scale: 1 = 633,600; 1 inch = 10 mile(s)

**Figure 1**  
**Project Location**

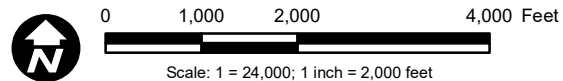
## Building 19 Rehabilitation Project

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Source: ESRI, AECOM, NASA, National Geographic Society; USGS 7.5' Topographic Quadrangle: Mountain View

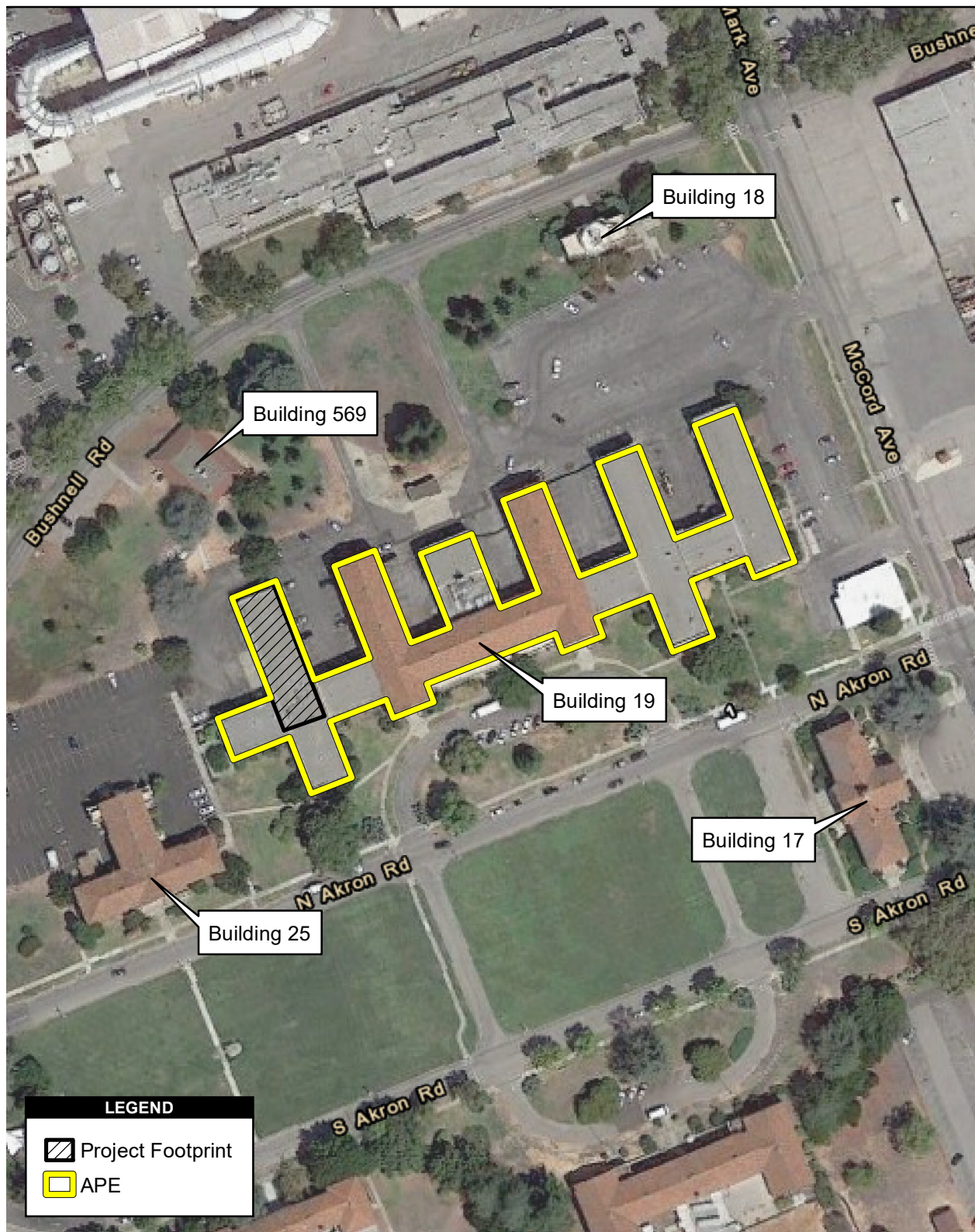


**Figure 2**  
**Project Vicinity Map**

## Building 19 Rehabilitation Project

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**Figure 3**  
**APE Map**

## Building 19 Rehabilitation Project

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